

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
**WO 2005/001319 A1**

(51) International Patent Classification<sup>7</sup>: **F16K 21/18**

(21) International Application Number:  
PCT/GB2004/002733

(22) International Filing Date: 24 June 2004 (24.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0314680.0 24 June 2003 (24.06.2003) GB

(71) Applicant and

(72) Inventor: BELL, Thomas, Henry [GB/GB]; 33B St  
Catherine's Road, Perth PH1 5SA (GB).

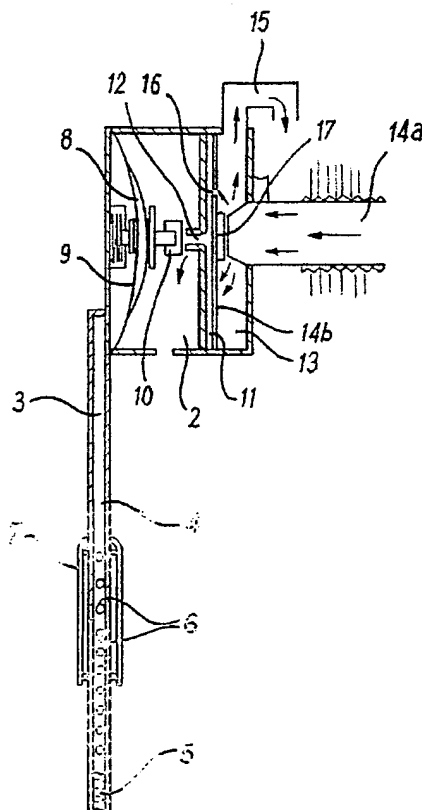
(74) Agent: KENNEDYS PATENT AGENCY LIMITED;  
Floor 5, Queens House, 29 St. Vincent Place, Glasgow G1  
2DT (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MY, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: IMPROVED VALVE SYSTEM



(57) Abstract: An improved valve system is described that comprises a diaphragm (9) and a means (3, 4) for transferring a fluid pressure from a head of fluid to the diaphragm. The valve system operates on the principle that the pressure associated with a head of fluid can be transferred to diaphragm and be employed to control the position of the diaphragm. Being able to control the position of the diaphragm allows the valve system to find numerous applications in an environment where action may be required in response to a rising fluid levels e.g. the control of water levels with cisterns or marine vessels, or as a portable flood barrier.

WO 2005/001319 A1

BEST AVAILABLE COPY



**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*